SUPPLEMENTARY MACHINE SERVICE BULLETIN No. 108-A

SUBJECT: Plus, Minus and Shift Key Locks-KAE and KASC Models.

DATE: July 16, 1931

TO ALL OFFICES:

We now have in production a new style locking device for the purpose of locking the plus, minus and shift keys against depression while the dial clearing keys mechanism is functioning. This is now standard equipment in all machines being manufactured of these models.

We are issuing the attached illustrated bulletin so that servicemen may be familiar with this mechanism which is referred to in figures 1 and 2.

It is not necessary to incorporate this improvement in all machines of these models in the field. There are, however, instances where operators encounter difficulty on account of their depressing a plus, minus, or shift key before the dial clearing keys mechanism is finished functioning with the result that a jam occurs. In such cases it is advisable to install this improvement so that such misoperation cannot be practiced.

INSTRUCTIONS

Remove bracket 9-28, locate drill jig #1 on it and drill clearance hole for 978 screw with #28 drill.

Remove lock bar 1527, guide blank, 1526, and start and stop switch. Scrap lock bar 1527.

Locate drill jig #2 on pin post 1051 on the 9-10 assembly, drill hole with #32 drill and tap with 6/40 thread.

Tilt machine upward and drill a hole in guide blank 1525 with #50 drill for spring 1006, or remove blank 1525 and drill the hole.

This mechanism can now be assembled and adjusted as illustrated and explained in figures #1 and #2 of this bulletin.

The material and tools mentioned in the foregoing will be furnished, upon receipt of a requisition to cover, at no charge.

Figure 3 of this bulletin illustrates and describes a change in design that was made to overcome the possibility of the carriage shifting the wrong way when the right-hand shift key is operated.

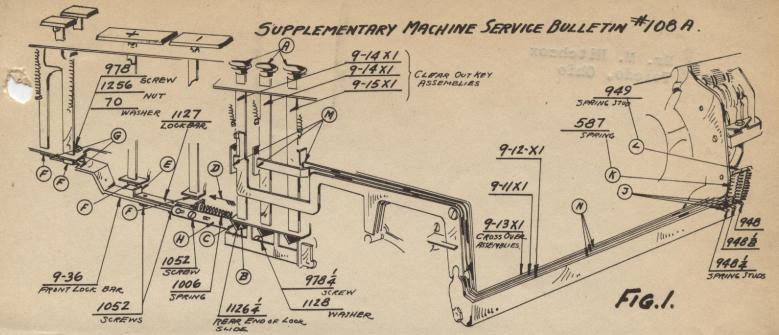
This mechanism can be incorporated, where required in KASC models, in the field as it is only necessary to remove rivet #1076 (not shown) and blank #1118 on the 9-23 assembly, and replace it with blank #1118x1, and to replace the 9-32 assembly with 9-32xl, shown as (R).

Figure 3A - Latch U, 9-37xl, can be assembled to the 9-19 assembly by removing pivot pin 967 and omitting spacer 1148, and attaching its tension spring 2786 to blank 1108\frac{1}{4} on the 9-19 assembly as shown. The addition of this latch (U) causes an engagement between it and the 9-32xl which prevents the carriage from shifting to the right in automatic division.

This material will also be supplied on requisition, at no charge.

FMS:GBC

General Service Manager



ABOVE IS SHOWN THE FUNCTIONING OF THE LOCKING DEVICE FOR THE PLUS AND MINUS AND SHIFT KEYS-DEPRESSION OF ANY KEY A FORCES END B REAINST INCLINED SURFACE C THUS FORCING LEVER H) REARWARD IN DIRECTION OF ARROW D - THIS LEVER H) CONTAINS TWO BLANKS E AND G WHICH CONTAIN SURFACES THAT SERVE TO LOCK THE KEYS F) BY CONTACT AGAINST DEPRESSION.

- ON E MODELS, LOCKS FOR THE CARRIAGE SHIFT KEYS ARE OMITTED.

NOTE - CROSS OVER LEVERS (N) HAVE BEEN PROVIDED WITH 3 SPRING POSTS () THESE POSTS HOLD 3 SPRINGS (K) TO PIN (L) IN THE GEAR CASE - THIS RESULTS IN A MORE POSITIVE CONTROL OF THE NOSES IN RELATION TO THE PAWLS IN THE DRUMS.

NOTE - ADONG THE SPRINGS (R) AND THE CLOSING OF SLOTS (M) IN KEYS (R) HAS ELIMINATED THE NECCESSITY OF LOCKS

(B) SHOWN ON PLATE 22 BULLETIN #108

#8

NOTE - MODEL - E- IS PROVIDED
WITH PARTS SHOWN IN FIG. 2

9-36 A

FRONT LOUR
3LIDE
LOCK
1052

943

WASHER

SCREW

NOTE- ADJUSTING SCREWS 1052 IN LOCK BARS 1126 41127- ARE PROVIDED SO THAT THIS MECHANISM
A MAY BE ADJUSTED TO SUIT.

9-32x/ 5

9-19 ASSEMBLY COMPLETE

1108/4

#968
FIG. 3A

2786 1148

93-37XI

THE ABOVE CHANGES IN DESIGN HAVE BEEN MADE TO OVERCOME THE DIFACULTY EXPERIENCED ON ACCOUNT OF THE CARRIAGE SHIFTING THE WRONG WAY WHEN THE RIGHT-HAND SHIFT KEY IS DEPRESSED. (FIG. 3.)

THE CHANGE IN BLANK @ AND THE ADDITION OF PART (R) HOLD THE ENGAGEMENT OF BLANK @ WITH PIN

THE SLOT S IN BLANK R IS PROVIDED SO THAT BLANK Q CAN PERFORM ITS NORMAL FUNCTION WHEN

THE LEFT HAND SHIFT KEY IS DEPRESSED

THE ADDITION OF LATCH (0-9-37XI ASSEMBLED AS SHOWN TO 9-9 ASSEMBLY CAUSES AN ENGAGEMENT BETWEEN IT AND 9-32XI WHICH PREVENTS THE CARRIAGE FROM SHIFTING TO THE RIGHT IN AUTOMATIC DIVISION.

Mr. M. Hitchcox Toledo, Ohio